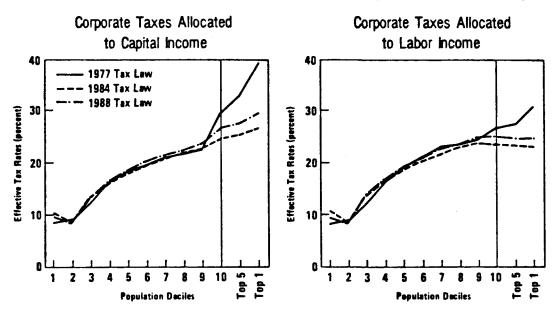


ERRATA
The Changing Distribution
of Federal Taxes: 1975 - 1990
October 1987

The attached five pages represent corrections to details in the referenced published CBO report. Readers may wish to detach the sheets and insert them at the appropriate places in the bound report.

Figure 5.
Effective Federal Tax Rates by Population Decile (All taxes combined)



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

TABLE 11. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE, WITH CONSTANT 1988 INCOMES: CORPORATE INCOME TAX ALLOCATED TO CAPITAL INCOME

Decile <u>a</u> /	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
-	Inco	me-Indexed 19	77 Tax Law		
First b/	-0.6	3.9	1.1	3.8	8.2
Second	-0.7	4.6	1.1	3.6	8.7
Third	1.5	6.8	1.3	2.2	11.8
Fourth	3.9	7.4	1.6	2.1	14.9
Fifth	5.8	7.7	1.7	1.6	16.8
Sixth	7.1	8.1	1.7	1.5	18.5
Seventh	8.5	8.0	1.8	1.4	19.6
Eighth	9.8	7.8	1.6	1.2	20.5
Ninth	11.3	7.2	1.7	1.1	21.4
Tenth	16.8	3.8	4.8	0.6	26.1
Top 5 percent	18.6	2.7	5.9	0.5	27.7
Top 1 percent	22.7	1.0	7.9	0.2	31.8
All Deciles 🗹	11.1	6.2	2.8	1.2	21.4
	Inco	ome-Indexed 19	84 Tax Law		
First b/	-0.5	4.6	0.8	5.7	10.6
Second	0.2	5.4	0.8	2.8	9.1
Third	2.7	7.9	0.9	2.1	13.6
Fourth	4.8	8.6	1.1	1.7	16.2
Fifth	6.4	9.0	1.2	1.4	18.0
Sixth	7.6	9.5	1.2	1.2	19.4
Seventh	8.5	9.6	1.2	1.1	20.4
Eighth	9.4	10.0	1.1	1.0	21.6
Ninth	10.6	9.7	1.2	0.9	22.4
Tenth	15.4	5.4	3.4	0.5	24.7
Top 5 percent	16.9	4.0	4.1	0.4	25.5
Top 1 percent	20.1	1.6	5.5	0.2	27.4
All Deciles c/	10.6	8.0	1.9	1.1	21.5
		Actual 1988 T	ax Law		
First b/	-0.8	5.0	1.1	4.5	9.7
Second	-0.4	5.9	1.0	2.1	8.6
Third	1.7	8.6	1.3	1.6	13.3
Fourth	4.1	9.4	1.6	1.4	16.5
Fifth	5.9	9.8	1.6	1.1	18.5
Sixth	7.2	10.4	1.6	1.0	20.2
Seventh	8.3	10.5	1.7	0.9	21.4
Eighth	9.0	10.9	1.6	0.8	22.3
Ninth	10.4	10.6	1.7	0.8	23.4
Tenth	15.5	6.0	4.7	0.4	26.6
Top 5 percent	16.9	4.4	5.7	0.4	27.4
Top 1 percent	19.7	1.8	7.7	0.2	29.3
All Deciles c/	10.4	8.7	2.7	0.9	22.7

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.

b. Excludes families with zero or negative incomes.

c. Includes families with zero or negative incomes not shown separately.

TABLE 12. EFFECTIVE FEDERAL TAX RATES, BY POPULATION DECILE, WITH CONSTANT 1988 INCOMES: CORPORATE INCOME TAX ALLOCATED TO LABOR INCOME

Decile <u>a</u> /	Individual Income Tax	Social Insurance Taxes	Corporate Income Tax	Excise Taxes	All Taxes
	Inco	me-Indexed 19	77 Tax Law		
First b/	-0.6	3.7	1.3	3.7	8.1
Second	-0.7	4.2	1.4	3.5	8.5
Third	1.2	6.3	2.2	2.2	11.9
Fourth	3.7	7.1	2.5	2.0	15.3
Fifth	5.6	7.6	2.7	1.6	17.5
Sixth	7.0	7.8	2.9	1.5	19.2
Seventh	8.4	7.9	3.0	1.3	20.7
Eighth	9.7	7.8	3.2	1.2	21.9
Ninth	11.2	7.1	3.2	1.1	22.7
Tenth	17.3	4.0	2.6	0.7	24.4
Top 5 percent	19.4	2.9	2.3	0.5	25.1
Top 1 percent	24.3	1.1	1.9	0.3	27.5
All Deciles c/	11.1	6.2	2.8	1.2	21.3
	Inco	me-Indexed 19	84 Tax Law		
First b/	-0.4	4.4	0.9	5.6	10.5
Second	0.1	4.9	1.0	2.8	8.8
Third	2.5	7.5	1.5	2.1	13.5
Fourth	4.7	8.3	1.7	1.7	16.5
Fifth	6.4	8.9	1.9	1.4	18.6
Sixth	7.5	9.3	2.0	1.2	20.0
Seventh	8.5	9.5	2.1	1.1	21.3
Eighth	9.4	10.0	2.2	1.0	22.6
Ninth	10.6	9.7	2.2	0.9	23.4
Tenth	15.6	5.7	1.8	0.6	23.7
Top 5 percent	17.4	4.3	1.6	0.4	23.8
Top 1 percent	21.1	1.7	1.3	0.3	24.4
All Deciles c/	10.6	8.0	1.9	1.1	21.6
		Actual 1988 T	ax Law		
First b/	-0.8	4.7	1.2	4.5	9.6
Second	-0.5	5.3	1.4	2.1	8.3
Third	1.5	8.0	2.1	1.6	13.3
Fourth	4.0	9.0	2.4	1.4	16.8
Fifth	5.8	9.6	2.6	1.1	19.2
Sixth	7.1	10.0	2.8	1.0	20.9
Seventh	8.2	10.3	2.9	0.9	22.3
Eighth	8.9	10.8	3.1	0.8	23.6
Ninth	10.3	10.5	3.1	0.8	24.7
Tenth	15.8	6.3	2.5	0.5	25.0
Top 5 percent	17.5	4.8	2.3	0.4	24.9
Top 1 percent	20.9	1.9	1.9	0.3	24.9
All Deciles c/	10.4	8.7	2.7	0.9	22.7

SOURCE: Congressional Budget Office tax simulation models.

a. Ranked by size of family income.

b. Excludes families with zero or negative incomes.

c. Includes families with zero or negative incomes not shown separately.

TABLE C-1. GINI COEFFICIENTS AND SUITS INDEXES

Indexes At Actual Income Levels

	1977 Corporate Tax Allocated to		1984 Corporate Tax Allocated to		1988 Corporate Tax Allocated to	
Decile	Capital	Labor	Capital	Labor	Capital	Labor
	Income	Income	Income	Income	Income	Income
Pretax Gini Coefficient Post-Tax Gini	.4502	.4427	.4884	.4845	.4940	.4890
Coefficient Difference Suits Index	.4185	.4185	.4700	.4700	.4724	.4724
	.0317	.0242	.0184	.0145	.0216	.0165
	.1452	.1025	.0854	.0630	.0980	.0696

Indexes With Income Held Constant at 1984 Levels

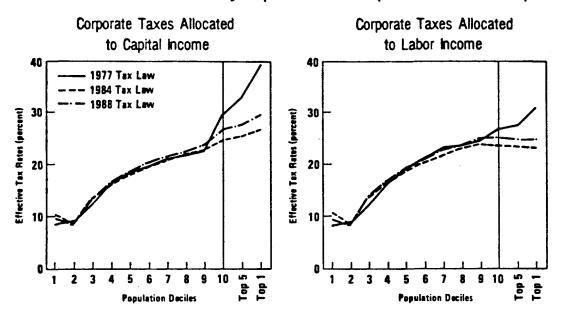
	Corpora	Law	Corpor	ual Law ate Tax ated to	1988 Corpor	Indexed Law ate Tax ated to
Decile	Capital	Labor	Capital	Labor	Capital	Labor
	Income	Income	Income	Income	Income	Income
Pretax Gini Coefficient Post-Tax Gini	.4884	.4845	.4884	.4845	.4884	.4844
Coefficient Difference Suits Index	.4640	.4657	.4700	.4700	.4649	.4666
	.0244	.0188	.0184	.0145	.0234	.0179
	.1197	.0868	.0854	.0630	.1018	.0720

Indexes With Income Held Constant at 1988 Levels

	Income-Indexed 1977 Law Corporate Tax Allocated to		Income-Indexed 1984 Law Corporate Tax Allocated to		Actual 1988 Law Corporate Tax Allocated to	
Decile	Capital	Labor	Capital	Labor	Capital	Labor
	Income	Income	Income	Income	Income	Income
Pretax Gini Coefficient Post-Tax Gini Coefficient Difference Suits Index	.4940	.4890	.4940	.4890	.4940	.4890
	.4703	.4705	.4765	.4747	.4724	.4724
	.0237	.0185	.0175	.0142	.0216	.0165
	.1210	.0894	.0847	.0643	.0980	.0696

Summary Figure 1.

Effective Federal Tax Rates by Population Decile (All taxes combined)



SOURCE: Congressional Budget Office tax simulation models.

NOTE: Families are ranked by the size of family income. Because family income includes the family's share of the corporate income tax, the ordering of families depends on the allocation of corporate taxes. The lowest decile excludes families with zero or negative incomes.

The effective tax rate is the ratio of taxes to family income in each income class.

THE CHANGING DISTRIBUTION OF FEDERAL TAXES: 1975-1990

The Congress of the United States Congressional Budget Office .

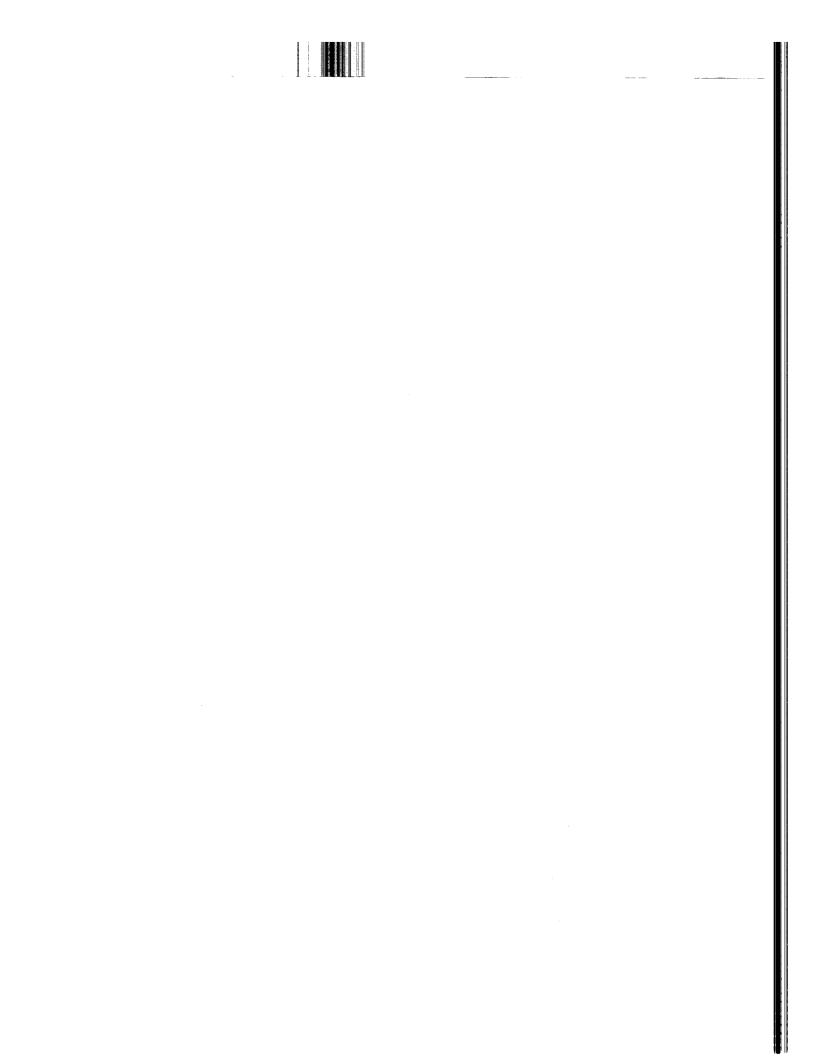
PREFACE	4	 		
			_	

In the past decade, the Congress has enacted a series of significant changes in federal tax laws. Over the same period, the level and distribution of incomes have also changed. This report examines how changes in tax laws and changes in income have affected the distribution of federal tax liabilities. This study was prepared at the request of Senator George J. Mitchell of the Committee on Finance, United States Senate. In accordance with the mandate of the Congressional Budget Office (CBO) to provide objective analysis, the report offers no recommendations.

Richard Kasten and Frank Sammartino of the Tax Analysis Division prepared the report under the direction of Rosemary Marcuss and Eric Toder. A number of people inside and outside CBO reviewed drafts and provided valuable criticism and suggestions. They include Marilyn Flowers, Robert Hartman, George Iden, Donald Kiefer, Stephen Long, Thomas Neubig, Joseph Pechman, John Sturrock, and Roberton Williams. Assistance in preparing the tables and figures was provided by Jeffrey Miller. Francis Pierce edited the manuscript. Linda Brockman set the paper up for publication. Kathryn Quattrone prepared the final draft for publication.

Edward M. Gramlich Acting Director

October 1987



CONTENTS **SUMMARY** xiii Ι INTRODUCTION 1 Topics Not Covered 2 П OVERVIEW OF FEDERAL REVENUES AND FEDERAL TAX LEGISLATION, 1975-1990 5 The Level and Composition of Federal Revenues 5 The Individual Income Tax 6 Social Insurance Taxes 12 The Corporate Income Tax 14 Excise Taxes 14 WHO PAYS THE TAXES? 19 Ш Tax Incidence 19 Incidence Assumptions Used in This Study 24 MEASURING FAMILY INCOME 27 IV Defining Family Income 27 The Distribution of Family Income in 1977, 1984, and 1988 35 THE DISTRIBUTION OF FEDERAL V TAXES IN 1977, 1984, AND 1988 41 Comparisons of Federal Taxes Over Years 41 THE EFFECT OF TAX LAW CHANGES ON VI THE DISTRIBUTION OF FEDERAL TAXES 49 Constant 1984 Income Comparisons 49 Constant 1988 Income Comparisons 54



APPENDIXES

A	Additional Detail on the Distribution of Income	63
В	Additional Detail on the Distribution of Federal Taxes 69	
C	Gini Coefficients and Suits Indexes 75	

TABLES		
1.	Exemptions, Standard Deductions, and Credits for the Individual Income Tax, 1975-1990	9
2.	Social Security Contribution Rates and Maximum Taxable Earnings, 1975-1990	13
3.	Corporate Income and Taxes, 1975-1990	15
4.	Derivation of Family Income for 1977 and 1984	30
5.	Distribution of Total Family Income by Population Decile	37
6.	Average Family Income in Each Population Decile, by Year and Treatment of Corporate Tax	39
7.	Effective Federal Tax Rates, by Population Decile: Corporate Income Tax Allocated to Capital Income	47
8.	Effective Federal Tax Rates, by Population Decile: Corporate Income Tax Allocated to Labor Income	48
9.	Effective Federal Tax Rates, by Population Decile, With Constant 1984 Incomes: Corporate Income Tax Allocated to Capital Income	52
10.	Effective Federal Tax Rates, by Population Decile, With Constant 1984 Incomes: Corporate Income Tax Allocated to Labor Income	53
11.	Effective Federal Tax Rates, by Population Decile, With Constant 1988 Incomes: Corporate Income Tax Allocated to Capital Income	59
12.	Effective Federal Tax Rates, by Population Decile, With Constant 1988 Incomes: Corporate Income Tax Allocated to Labor Income	60
A-1.	Minimum Income Level in Each Population Decile, by Year and Treatment of Corporate Tax	64
A-2.	Distribution of Family Income from Each Source of Income, by Population Decile, With Corporate Income Tax Allocated to Capital Income	65



viii THE C	HANGING DISTRIBUTION OF FEDERAL TAXES: 1975-1990	October 1987
A-3.	Distribution of Family Income from Each Source of Income, by Population Decile, With Corporate Income Tax Allocated to Labor Income	66
A-4.	Distribution of Family Income by Source of Income for Each Population Decile, With Corporate Income Tax Allocated to Capital Income	67
A-5.	Distribution of Family Income by Source of Income for Each Population Decile, With Corporate Income Tax Allocated to Labor Income	68
B-1.	Distribution of Family Income and of Federal Tax Payments by Population Decile, With Corporate Income Tax Allocated to Capital Income	70
B-2.	Distribution of Family Income and of Federal Tax Payments by Population Decile, With Corporate Income Tax Allocated to Labor Income	71
B-3.	Distribution of Total Federal Taxes Paid, by Type of Tax, for Each Population Decile, With Corporate Income Tax Allocated to Capital Income	72
B-4.	Distribution of Total Federal Taxes Paid, by Type of Tax, for Each Population Decile, With Corporate Income Tax Allocated to Labor Income	73
C-1.	Gini Coefficients and Suits Indexes	77

FIGURES		
S-1.	Effective Federal Tax Rates by Population Decile	xv
S-2.	Share of Total Federal Revenues by Source, 1975-1990	xvi
S-3.	Effective Tax Rates by Population Decile: Individual Income Tax and Social Insurance Taxes	xviii
S-4.	Effective Tax Rates by Population Decile: Corporate Income Tax and Excise Taxes	xx
S-5.	Effective Federal Tax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes	xxii
1.	Revenues by Source as Shares of GNP, 1975-1990	6
2.	Ratio of Income Tax Threshold to Poverty Level, 1975-1990	10
3.	Individual Income Tax as a Percent of Taxable Income	12
4.	Federal Excise Tax Rates, 1975-1990	16
5.	Effective Federal Tax Rates by Population Decile	42
6.	Effective Federal Tax Rates by Population Decile: Individual Income Tax and Social Insurance Taxes	44
7.	Effective Federal Tax Rates by Population Decile, Corporate Income Tax and Excise Taxes	46
8.	Effective Federal Tax Rates by Population Decile, 1984, Under Tax Laws Adjusted to 1984 Incomes	51
9.	Effective Federal Tax Rates by Population Decile,	55



10. Effective FederalTax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes: Individual Income Tax and Social Insurance Taxes 56 11. Effective Federal Tax Rates by Population Decile, 1988, Under Tax Laws Adjusted to 1988 Incomes: Corporate Income Tax and Excise Taxes 58 C-1. Lorenz Curve 76 C-2. Tax Concentration Curve 76